



MIAMI-SOUTH FLORIDA

National Weather Service Forecast Office

<http://www.weather.gov/miami>

MARCH 2016 WEATHER SUMMARY

Warm and Dry

April 4th, 2016: after a wet and stormy January and parts of February, March resulted in a noticeable departure and return to mainly dry and warm conditions. High pressure in the mid and upper levels predominated across Florida and the subtropical western Atlantic Ocean (Figure 1) which led to less fronts moving through south Florida. This in turn caused extended periods of warm to even hot temperatures. All four climate sites in south Florida recorded monthly average temperatures in the top 10 warmest on record for March, averaging anywhere from 2 to as much as 4 degrees above normal. 90-degree temperatures were registered for the first time this year in Miami, the first time since October of last year.

Here are some noteworthy temperature statistics for each of the four main climate sites in south Florida:

Miami International Airport recorded an average March temperature of 76.5 degrees Fahrenheit. This is 3.9 degrees above the 30-year normal for March and is the **3rd warmest March on record** (going back to 1895). The average high temperature was 83F. The average low temperature was 70F. The hottest reading of the month was 91 degrees on the 28th. The coolest reading was 57 degrees on the 22nd.

Fort Lauderdale/Hollywood International Airport recorded an average March temperature of 75.1 degrees Fahrenheit. This is 2.2 degrees above the 30-year normal for March and is the **8th warmest March on record** (going back to 1911). The average high temperature was 81F. The average low temperature was 69F. The hottest reading of the month was 87 degrees on the 15th. The coolest reading was 55 degrees on the 22nd.

Palm Beach International Airport recorded an average March temperature of 74.8 degrees Fahrenheit. This is 4.3 degrees above the 30-year normal for March and is **tied for the 4th warmest March on record** (going back to 1889). The average high temperature was 82F. The average low temperature was 68F. The hottest reading of the month was 89 degrees on the 15th. The coolest reading was 55 degrees on the 21st and 22nd.

Naples Municipal Airport recorded an average March temperature of 73.0 degrees Fahrenheit. This is 3.0 degrees above the 30-year normal for March and is the **6th warmest March on record** (going back to 1942). The average high temperature was 82F. The average low temperature was 65F. The hottest reading of the month was 87 degrees on the 26th. The coolest reading was 50 degrees on the 22nd.

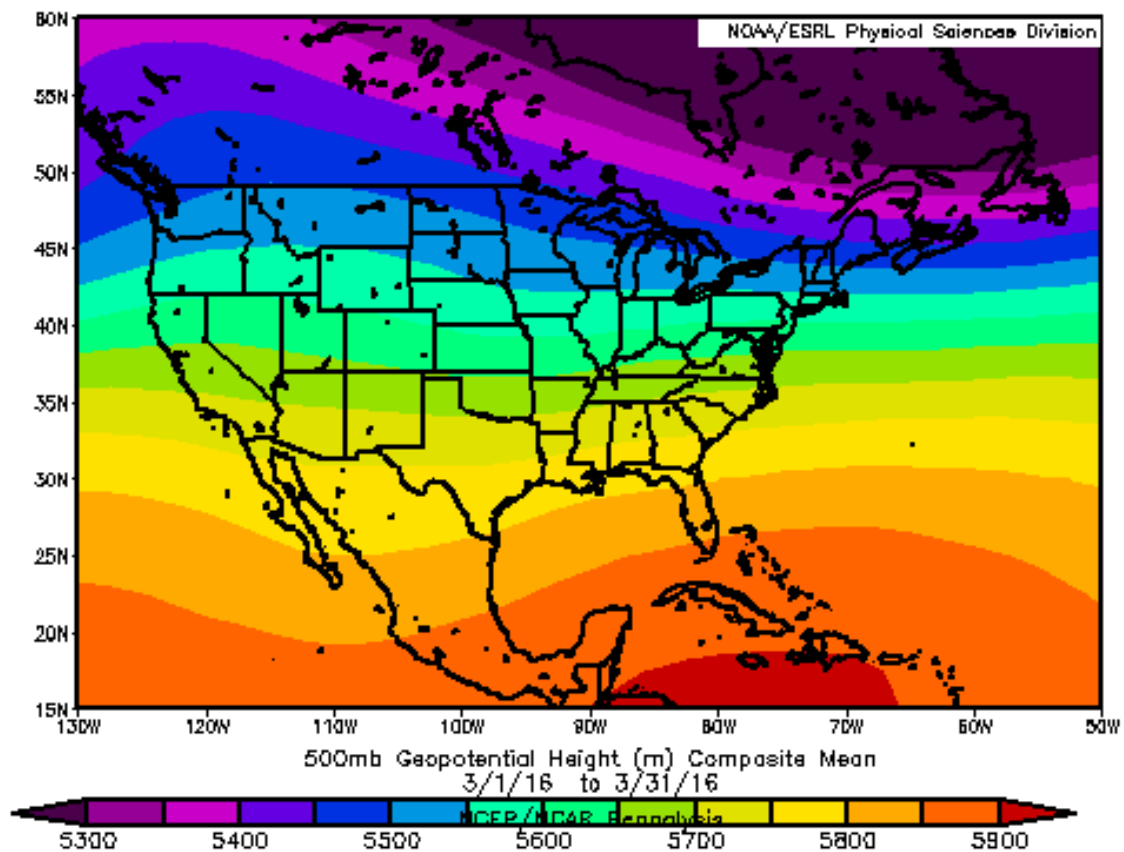


Figure 1: Mean mid-tropospheric (500 mb) heights for March 2016. Florida and the subtropical western Atlantic was influenced by high pressure aloft, which acted to limit rainfall and feed warm, subtropical air into the region.

Precipitation and Severe Weather

It was a dry March across most of south Florida, with rainfall running between 1 and 3 inches below normal (Figure 2). A few sites recorded less than an inch for the entire month, including Miami International Airport, Miami Beach, LaBelle, Naples Municipal Airport and Marco Island. Several observation sites recorded amounts which were in the top 20 driest on record for the month of March, including Miami Beach with their

Most of the month's rainfall occurred with three events: a cold front on the 19th which brought strong thunderstorms, interaction of warm, unstable air and an upper air disturbance on the 24th, and a weak cold front on the 29th and 30th. There were two main swaths of above normal precipitation, one across central and northern Broward County and far southeastern Palm Beach County, and the other across northern Palm Beach County. Flooding occurred in both these areas on the 24th, 29th and 30th with as much as 4-6 inches of rain falling in only a few hours.

Strong to severe thunderstorms swept through most of southern Florida on the 19th, causing wind gusts of 40-55 mph and even a tornado which touched down on the sand at Fort Lauderdale Beach before moving offshore. Another round of strong to severe storms occurred on the 24th and 29th, with the latter event leading to large hail, wind gusts to near 60 mph and flooding in the Boca Raton area. Excessive lightning with these storms caused three firefighters to be injured in Boca Raton.

Here are March rainfall totals for select South Florida sites:

Location (Beginning of Period of Record)	March 2016 Rainfall (inches)	Departure from Normal/Rank
Big Cypress	2.03	
Brighton Reservation (Glades Co.)	3.16	
Cape Florida	0.17	
Canal Point (1941)	3.42	-0.70
Fort Lauderdale/Hollywood Int'l (1912)	2.84	-0.52
Fort Lauderdale Dixie Water Plant	3.22	-0.36
Fort Lauderdale Executive Airport	3.04	
Fort Lauderdale Beach	3.15	

Hialeah (1940)	0.82	-2.91/ 16th driest
Hollywood (1963)	4.03	+0.67
Homestead General Airport (1990)	1.75	-0.75
Immokalee (1971)	0.67	-2.26/8th driest
Juno Beach	7.11	
LaBelle (1929)	0.91	-2.41/17th driest
Marco Island	0.14	
Miami Beach (1928)	0.10	-2.90/2nd driest
Miami International Airport (1911)	0.61	-2.39/20th driest
Moore Haven (1918)	2.09	-1.02
Muse	1.68	
North Miami Beach	1.71	
Naples East/Golden Gate	1.04	
Naples Municipal Airport (1942)	0.45	-0.61
NWS Miami	1.58	
Oasis Ranger Station (1979)	1.21	-1.73/13th driest
Opa-Locka Airport	1.42	
Ortona (1940)	1.23	-2.44/11th driest
Palm Beach Gardens	4.90	
Palm Beach International Airport (1888)	2.42	-2.17
Pembroke Pines – North Perry Airport	1.52	
Pompano Beach Airpark	3.16	
Miami Executive Apt – West Kendall	1.82	
The Redland (1942)	2.23	-0.68
South Bay (15S)	0.93	

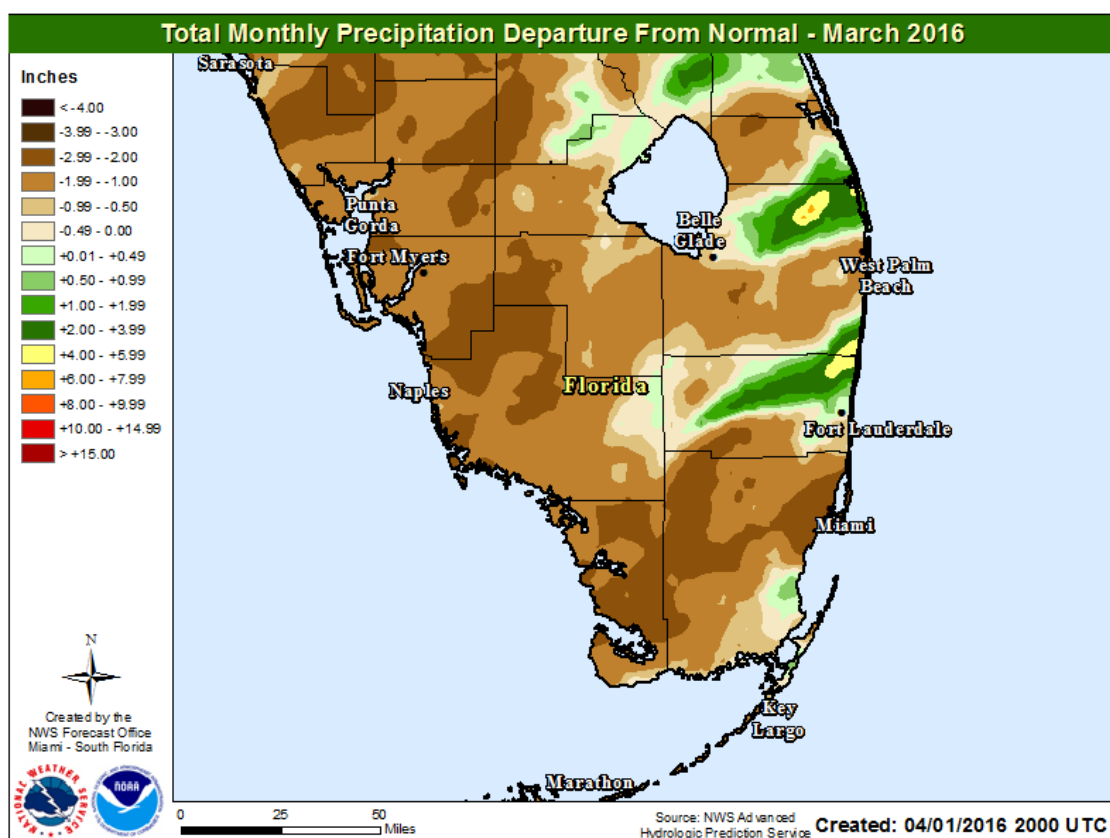


Figure 2: March rainfall departure from normal in inches.

Outlook for April-June

[The outlook by the NOAA Climate Prediction Center](#) calls for equal chances of above, below or near normal temperatures and precipitation for April, with an increased likelihood of warmer and wetter than normal temperatures for the period from April through June (Figure 4). The wetter than normal outlook is in line with the lingering El Niño pattern, but with perhaps lower confidence than during the past winter.

April and early May is the transition period from the dry to the wet season, and it's normal to have alternating periods of dry and wet/stormy weather in south Florida this time of year. The dry periods increase our wildfire risk due to warm and dry conditions, while the stormy periods are often accompanied by thunderstorms, strong winds, hail and even tornadoes. Lightning associated with these storms can even start wildfires.

Rip currents also can be a problem during this time of year as the amount of beachgoers increases. All residents and visitors visiting area beaches are strongly urged to heed the advice of Ocean Rescue lifeguards and swim near a lifeguard. [Visit the National Weather](#)

[Service Rip Current Awareness page](#) for more information. In fact, we had one reported fatality from rip currents in March, a teenager who drowned in Haulover Beach on March 23rd.

Hurricane season begins in June, which means there's no better time than now to begin getting ready. Websites such as [ready.gov](#) provide good preparedness tips.

For the latest south Florida weather information, including the latest watches, advisories and warnings, please visit the National Weather Service Miami Forecast Office's web site at [weather.gov/southflorida](#).

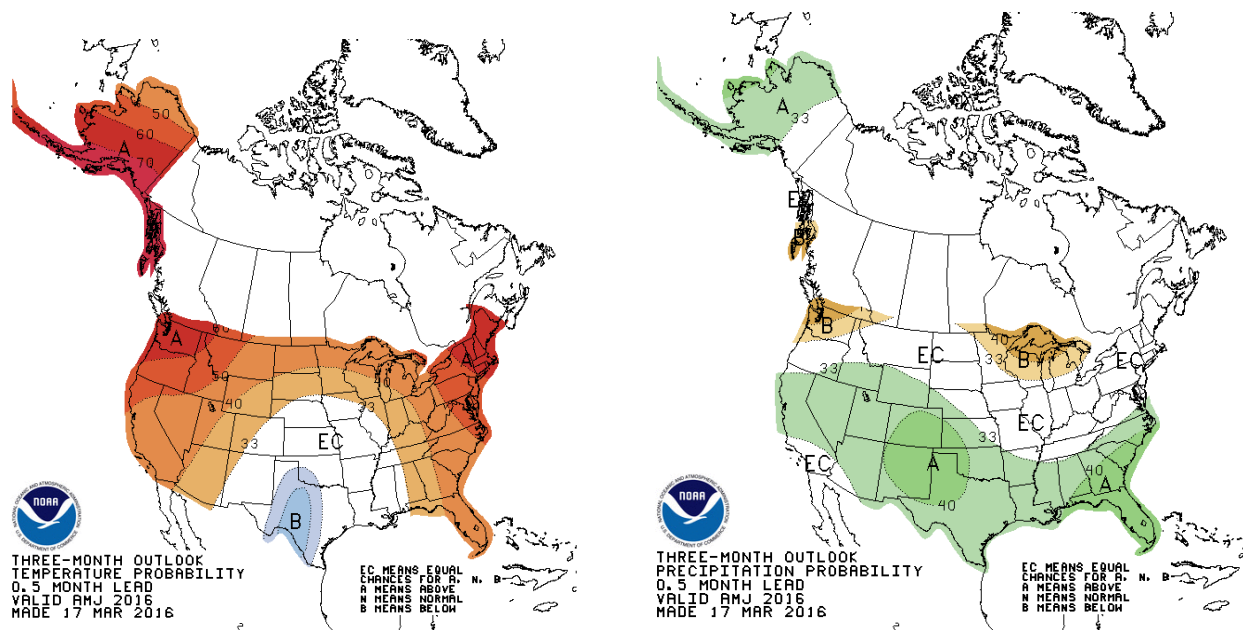


Figure 3: NOAA Climate Prediction Center Temperature (left) and Precipitation (right) outlooks for April-June.